

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-3 (Canceled)

4. (Currently amended) A method for removing hair from a patient's skin, said method comprising:

scanning an acoustic transducer over the skin surface to identify depths and locations of the a plurality of hair follicles beneath the skin; and
transcutaneously focusing high intensity acoustic energy at the depths and locations of at least some of the identified hair follicles~~follicle locations~~.

5. (Original) A method as in claim 4, wherein the high intensity acoustic energy is transcutaneously focused from an acoustic transducer.

6. (Original) A method as in claim 5, wherein a single acoustic transducer is used both to scan for the hair follicle locations and to deliver the focused high intensity acoustic energy.

7. (Original) A method as in claim 5, wherein different acoustic transducers are used for scanning for the hair follicle locations and for delivering the focused high intensity acoustic energy.

8. (Currently amended) A method for removing hair from a patient's skin, said method comprising:

immobilizing a transducer platform over a target area of the patient's skin;

scanning an acoustic transducer over the skin to determine depths and the locations beneath the skin of a plurality of hair follicles relative to the immobilized ~~mobilized~~ transducer platform;

selecting individual hair follicles to be ablated from the plurality of imaged hair follicles;

positioning an acoustic transducer over the skin at at least some of the determined depths and locations relative to the immobilized platform; and

transcutaneously focusing high intensity acoustic energy at said depths and locations of the hair follicles from the positioned acoustic transducer.

9. (Original) A method as in claim 8 wherein scanning comprises mechanically advancing the transducer in X- and Y-directions over an imaging plane to known coordinates.

10. (Original) A method as in claim 9, wherein positioning comprises mechanically advancing the transducer in X- and Y-directions to the same coordinates.

Claim 11 (Canceled)

12. (Currently amended) A method as in claim 4 or 8[[11]], wherein focusing ~~adjusting the depth of~~ high intensity acoustic energy focus comprises translating the positioned a transducer along a vertical line.

13. (Currently amended) A method as in claim 4 or 8[[11]], wherein adjusting the depth of focus comprises adjusting the curvature of a ~~transducer~~ surface of the positioned transducer.

14. (Currently amended) A method as in claim 4 or 8[[11]], wherein adjusting the depth of focus comprises controlling the operation of a phased array transducer.

15. (Currently amended) A method as in claim ~~[[1,]]~~ 4; or 8, wherein the high intensity acoustic energy is focused at a depth beneath the skin in the range from 1 mm to 6 mm and at a width in the range from 0.1 mm to 0.3 mm.

16. (Original) A method as in claim 15, wherein the high intensity acoustic energy is delivered under conditions selected to raise the temperature at the hair follicle to at least 50°C for a time of at least 0.1 sec.

17. (Currently amended) A method as in claim 16, wherein the high intensity acoustic ~~ablative~~-energy is delivered in an amount from 0.1 J to 10 J to the ~~each~~-hair follicle.

18. (Original) A method as in claims 4 or 8, further comprising producing an image of the scanned hair follicle locations.

19. (Currently amended) A method as in claim 18, further comprising designating which of the hair follicles for which locations have been scanned are ~~and~~ to be ablated.

20. (Currently amended) A system for hair removal, said system comprising:
a transducer selectively operable to image hair follicle locations and to acoustically ablate hair follicles at said imaged locations;

means for tracking a position ~~the location~~ of the transducer over a patient's skin surface; and

a controller for acquiring image data from the transducer including the depth and location of each hair follicle and for directing high intensity acoustic energy to the depths and locations of selected ones of the imaged hair follicles.

21. (Original) A system as in claim 20, wherein the tracking means comprises:

a transducer platform adapted to be engaged against the patient's skin; and

a drive system for advancing the transducer over a planar region defined by the platform, wherein the position of the transducer can be both selected and recorded.

22. (Currently amended) A system as in claim 21, wherein the drive system is a an X-Y motion positioner.

23. (Original) A system as in claim 22, wherein the X-Y motion positioner is repeatable to ± 0.01 mm.

24. (Currently amended) A system as in claim ~~[[1,]]~~ 4, or 8, wherein the high intensity acoustic energy is focused at a depth beneath the skin in the range from 1 mm to 6 mm and at a width in the range from 0.1 mm to 0.3 mm.

25. (Original) A system as in claim 24, wherein the high intensity acoustic energy is delivered under conditions selected to raise the temperature at the hair follicle to at least 50°C for a time of at least 0.1 sec.

26. (Original) A system as in claim 24, wherein the ablative energy is delivered in an amount from 0.1 J to 10 J to each hair follicle.

27. (Original) A system as in claim 20, further comprising a display which provides a visual depiction of the hair follicle locations.

28. (Original) A system as in claim 27, further comprising means for a user to designate which of the hair follicles in the visual depiction are to be ablated.